CHAPTER 2

SYSTEM suMMARY

A. SYSTEM APPLICATION

1. WARMAPS consists of a military subsystem and a civilian subsystem. Data for each subsystem are developed by the DoD Components for submission to *the* system.

2. The system software provides users with the capability to perform the following functions:

a. Construct a WARMAPS data base from DoD Component data submissions (from magnetic tape or by direct key entry) .

b. Check a WARMAPS data base for errors.

c. Modify a WARMAPS data base to correct data values and to add or delete data records.

d. Adjust manpower data values to reflect user-desired changes.

e. Query a WARMAPS data base.

f. Generate selected output reports.

3. All functions are performed in an interactive fashion by the" user while engaged in a MULTICS terminal session.

B. SYSTEM OPERATION

All system functions are controlled by the user by way of interactive sessions at a MULTICS terminal. The system can be operated using any terminal connected to the 1ISG MULTICS. The system uses the remote line printer or laser page printer located at the MULTICS site for producing hard copy reports.

c. SYSTEM ORGANIZATION

1. The system is menu driven. The menus and "other terminal displays with appropriate responses are discussed in Appendix E and Appendix H. Appendix A is a set of flow charts illustrating system organization.

a. Figure A-1 illustrates the overall WARMAPS military manpower processing cycle.

b. Figure A-2 shows the relationship of the functional parts of the military Automated Data Processing (ADP) subsystem that a user controls to process military manpower data.

c. Figure A-3 illustrates the overall WARMAPS civilian manpower processing cycle.

d. Figure A-4 shows the relationship of the functional parts of the civilian ADP subsystem that a user controls to process civilian manpower data.

e. Figure A-5 shows the construction of the civilian manpower data base.

2. The numbers in the comers of the boxes in Figures A-2 and A-4 correspond to options that are displayed on the main military or civilian manpower subsystem menus.

D. SYSTEM PERFORMANCE

Figure B-1 illustrates the WARMAPS User Directories and Figure B-2 shows a number of important MULTICS commands used in the operation of WARMAPS.

1. Military Manpower Subsystem

a. Input. The system receives military manpower data from the Military Services each year during the Program Objectives Memorandum (POM) reporting period. A major update is performed on these data just before the President's Budget is finalized. The Component submissions for each year contain data for the beginning and ending year of a five-year period (corresponding to the Five Year Defense Program (FYDP)). The maximum file size of any Component submission is currently about 2000 records for each of the two years.

b. output . The reports displayed in Appendix C are produced by the system. These products are generated during the POM reporting period, as the data base is being updated, and during other periods upon request.

c. Processing time. Typical processing times for military manpower processing functions (Appendix E) are listed below:

(1) Loading a Component input tape into a MULTICS segment--average run time: 1 minute.

(2) Building the military manpower data file--average run time: 1 minute.

(3) Editing the military manpower data to detect errors--average run time: 1 minute.

(4) Updating the military manpower file--run time: depends on the number of records to be manipulated.

(5) Generating reports (Appendix C)--average run time: 3 minutes.

d. Error correction. The raw data submitted by the Components usually have errors or invalid data in a few of the records. These errors are displayed in an error report (Appendix D) produced during editing. They can be corrected by the user with system routines.

2. Civilian Manpower Subsystem

a. Input. The system receives current civilian manpower data from the Military Services, Joint Chiefs of Staff, and Defense Agencies every 1 or 2 years, as directed by DASD(MP&R) in conjunction with a mobilization planning review. These reviews are usually timed to precede a scheduled civilian mobilization mini-exercise *or* the biennial federal mobilization exercise. To date, the maximum file size of any Component submission" has been less than 16?,000 records.

b. output . The reports displayed in Appendix F are produced by the system. These reports are generated during new data base development, exercise reporting periods, and during other periods upon request.

c. Processing time. Processing times for civilian manpower processing functions (Appendix H) are highly variable, depending upon the size of the file and the computer system load. Most operations on small files (e.g. Defense Agencies) take less than a minute. Sorting and preparing reports on the largest files (e.g. Army or Air Force) can take over an hour.

d. Error correction. The tapes submitted by the Components may contain errors *or* invalid data. These errors are displayed in the error report (Appendix G) produced during editing. Errors can then be corrected by the user with system routines.

E. DATA BASE

1. Military Manpower Subsystem

a. The ❑ ilitary ❑ anpower data base consists of a single file for each Service that is used for report generation. The file contains records with the following elements:

year
component
tab le
theater
manpower category
manpower type
time phased manpower data (demand and supply)

b. These elements are explained in detail in DoD 11OO.19-H, "Wartime Manpower Program Guidance."

2. Civilian Manpower Subsystem

a. The civilian ❑ anpower data base consists of a single file for each Military Service and Defense Agency that is used for report generation. The file contains records with the following elements:

component
location
theater
region
unit
employment category
occupation
Integrated Defense Occupational Stratification (IDOS)
pay plan
grade
time phased manpower data (demand and supply)

b. These elements are explained in detail in DoD 1100.19-H, "Wartime Manpower Program Guidance."

F. INPUTS, PROCESSING, AND OUTPUTS

1. Military Manpower Subsystem

a. Inputs. DoD Components submit military manpower data either on magnetic tape or through direct key entry via MULTICS terminals. After the system generates output reports, DoD Components annotate the reports for desired changes in the manpower data. The annotated reports are then returned and appropriate changes are made to the data base.

b. Processing. The system performs the following functions on the data submitted by the Components:

(1) Transforms the Component input data submission into the internal file format.

(2) Edits the military manpower data file for errors and prepares it for report generation.

(3) Updates the data file (add, delete, or correct records), as needed.

(4) Generates selected reports according to users' requests.

c. outputs. The users can produce the reports shown in Appendix c.

2. Civilian Manpower Subsystem

a. Inputs. DoD Components submit civilian manpower data either on magnetic tape, IBM PC-compatible floppy diskette or through direct key entry via MULTICS terminals. After the file is constructed, error checks are performed and output reports are generated. These reports are reviewed and annotated to assist the Component in diagnosing illogical and invalid data.

b. Processing. The system performs the following functions on the data submitted by the Components:

(1) Transforms the Component input data submission into the internal file format.

(2) Checks the civilian manpower data file for errors and compiles an error report.

(3) Updates the data file with the users' corrections, additions, or deletions.

(4) Creates sorted files for report generation.

(5) Generates selected reports according to users' requests.

c. outputs. The users can produce the reports shown in Appendix F.